RISK MAP FOR INDIANA

Operation Stay Afloat

March 2012

RiskMAP
Increasing Resilience Together

Paradigm Shift:
Map Mod to Risk MAP

- Map Modernization used new technology to improve quality, reliability, and availability of flood hazard maps and data
- Focused on digitizing maps to provide more accurate data to community planners

Overview: Risk MAP

Map MODERNIZATION
Federal Emergency Management Agency

- Five year effort to modernize maps
- Result: digital flood data and digital maps for 92% of population
- Improved flood data quality

- Limited up-front coordination
- Scoping not mandatory

RiskMAP
Increasing Resilience Together

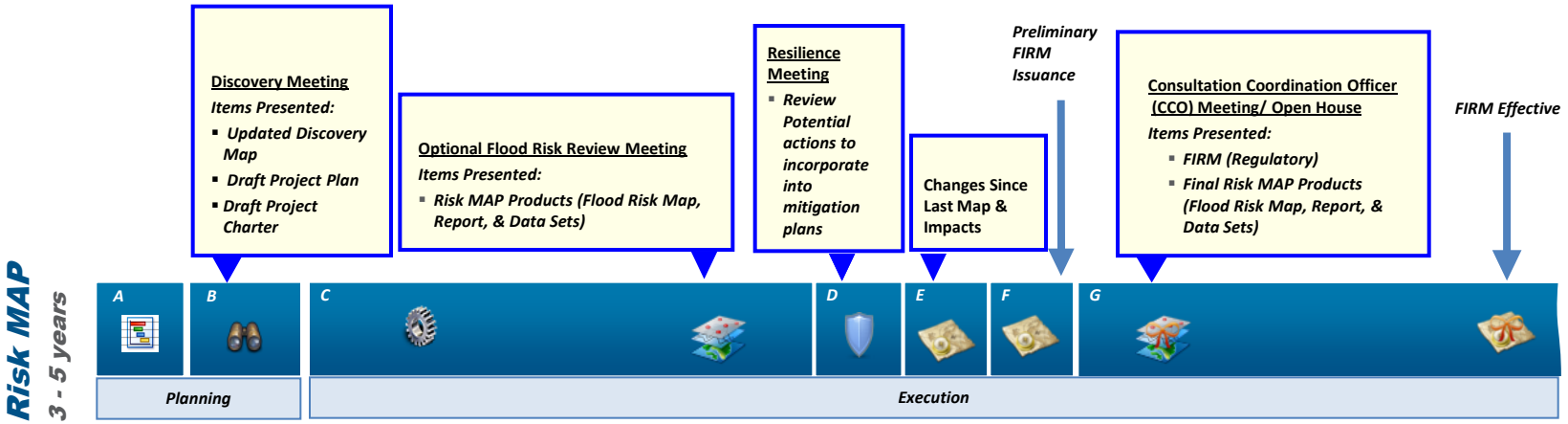
- Collaborative approach
- Goals: quality data, public awareness, action that reduces risk
- Watershed-oriented

- Focus on up-front coordination
- Discovery is mandatory

The Vision for Risk MAP

Through collaboration with State, Local, and Tribal entities, Risk MAP will deliver quality data that increases public awareness and leads to action that reduces risk to life and property

Risk MAP Timeline



A. Planning & Budgeting (3 Mos.)

B. Discovery (2-4 Mos.)

C. Data Development & Sharing (9-15 Mos.)

D. Risk Awareness & Mitigation Outreach (1-3 Mos.)

E. Proposed NFIP Map Changes & Impacts (1-3 Mos.)

F. Preliminary NFIP Map Release & Mitigation Planning (1-3 Mos.)

G. Due Process & Path Forward (9-15 Mos.)

Risk MAP Timeline

Risk MAP
3 - 5 years

Discovery Meeting

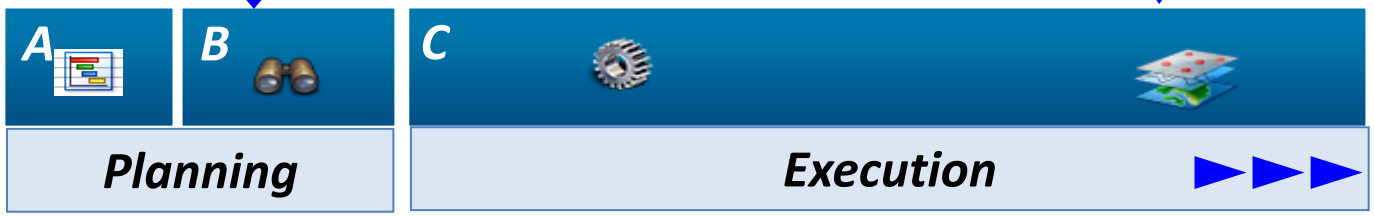
Items Presented:

- ***Updated Discovery Map***
- ***Draft Project Plan***
- ***Draft Project Charter***

Optional Flood Risk Review Meeting

Items Presented:

- ***Risk MAP Products (Flood Risk Map, Report, & Data Sets)***



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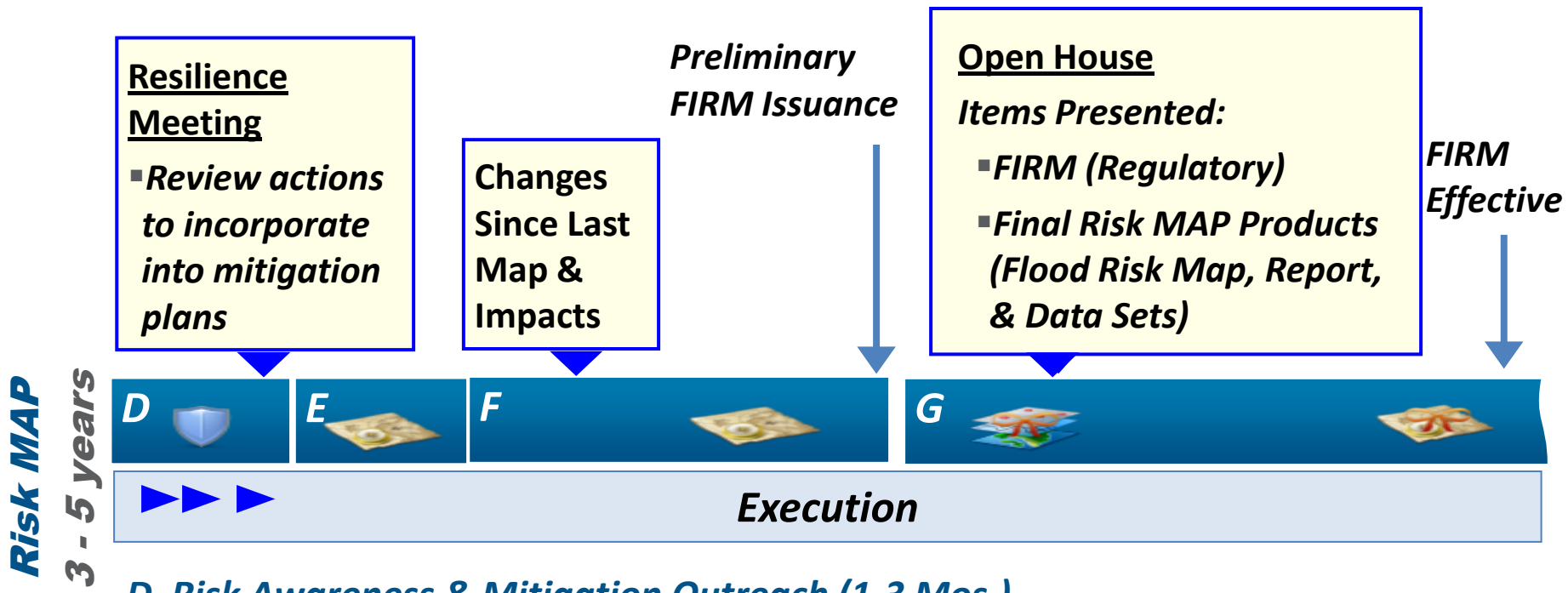

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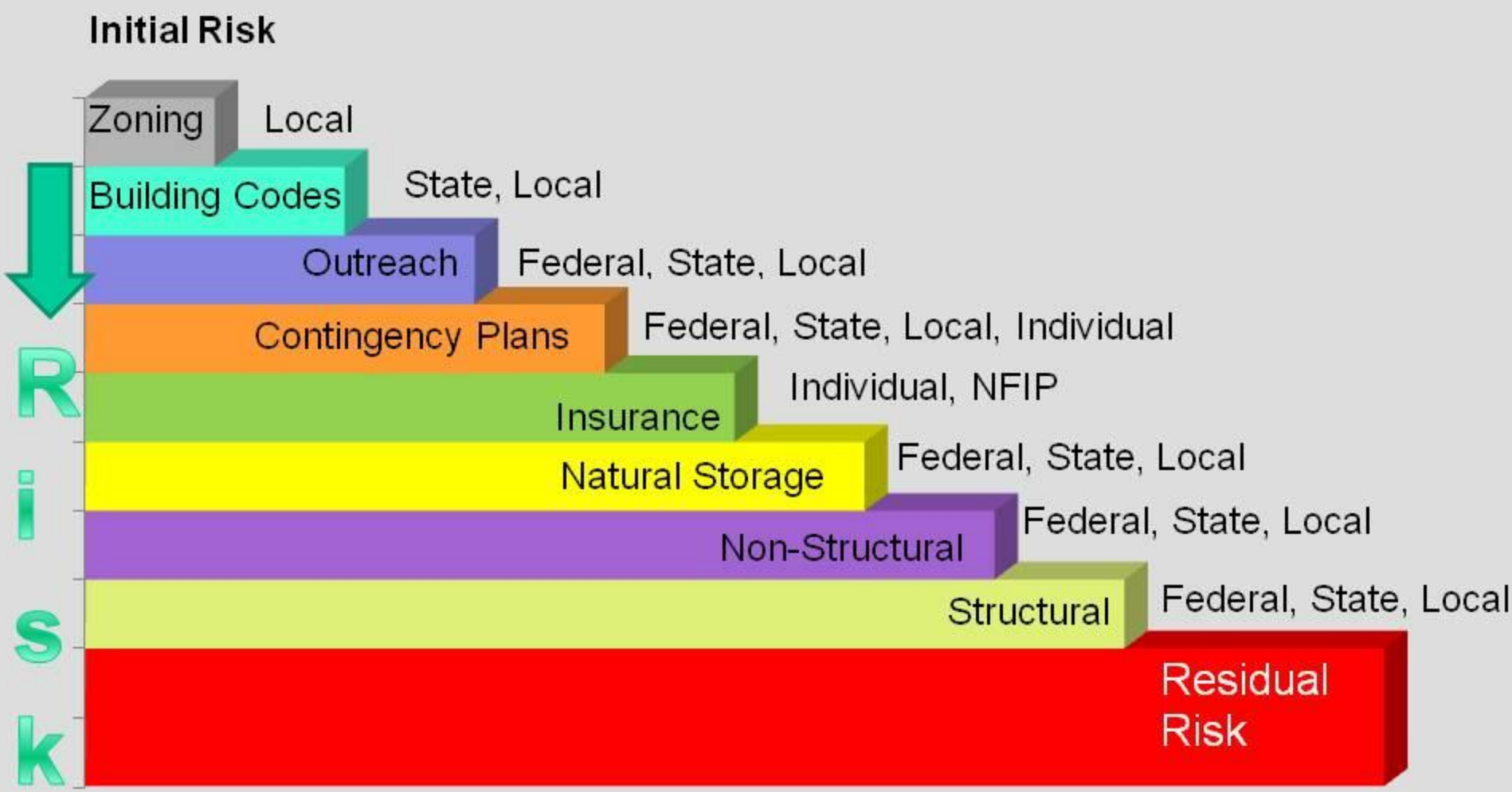
Risk MAP Goals

- Further enhance Map Mod products and align flood risk programs
- Engage communities in planning and assessment
- Guide communities in communicating risk to constituents
- Encourage participation in the NFIP

Deliver quality data to increase public awareness and reduce risk to life and property

Shared Flood Risk Management: Buying Down Risk



Risk Reduction Tools
(Cumulative)

All stakeholders contribute to reducing risk!

Discovery

Discovery is the process of data mining, collection, and analysis with the goal of initiating a flood risk or mitigation project and risk discussions with the watershed

When:

- After an area/watershed has been prioritized
- Before a Risk MAP project is scoped or funded

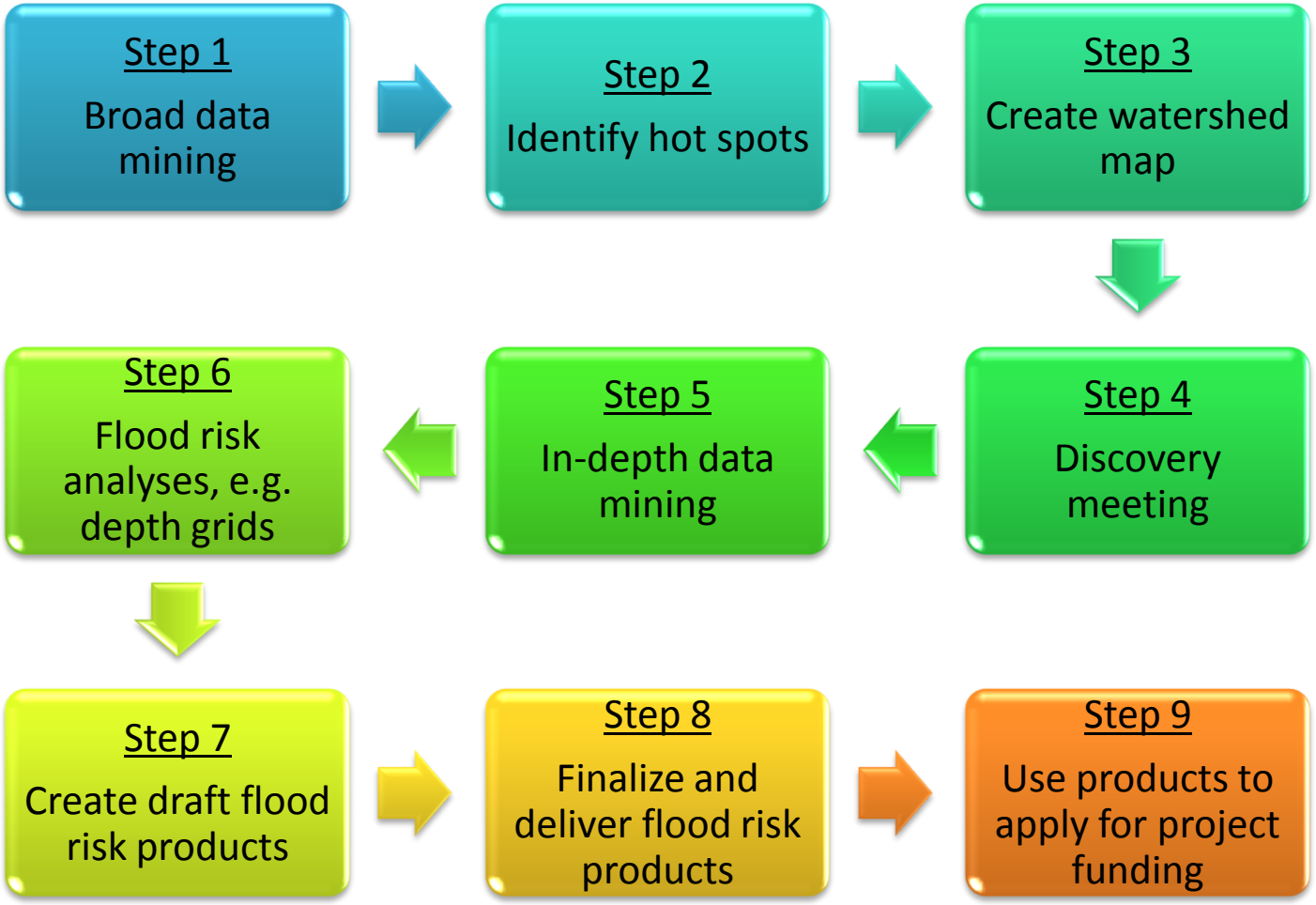
Required for new and updated…

- Flood studies
- Flood risk assessments
- Mitigation planning technical assistance projects

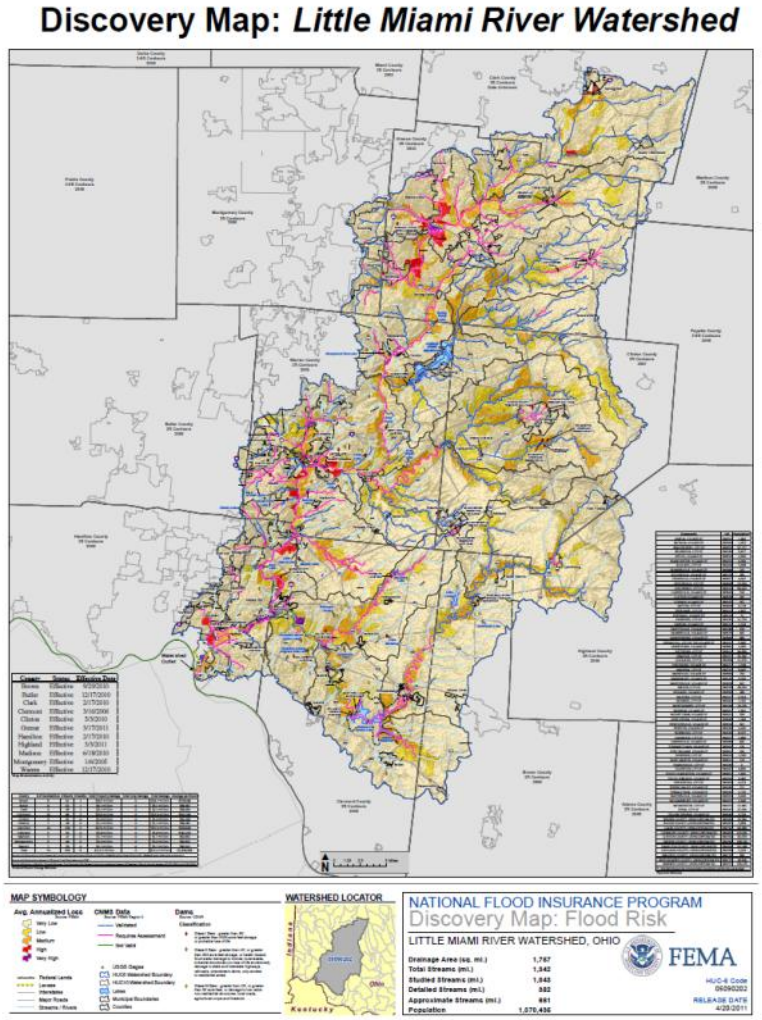
Why:

- Increases visibility of flood risk information, education, involvement
- Helps inform whether a Risk MAP project will occur in the watershed

Risk MAP Process: Final Steps



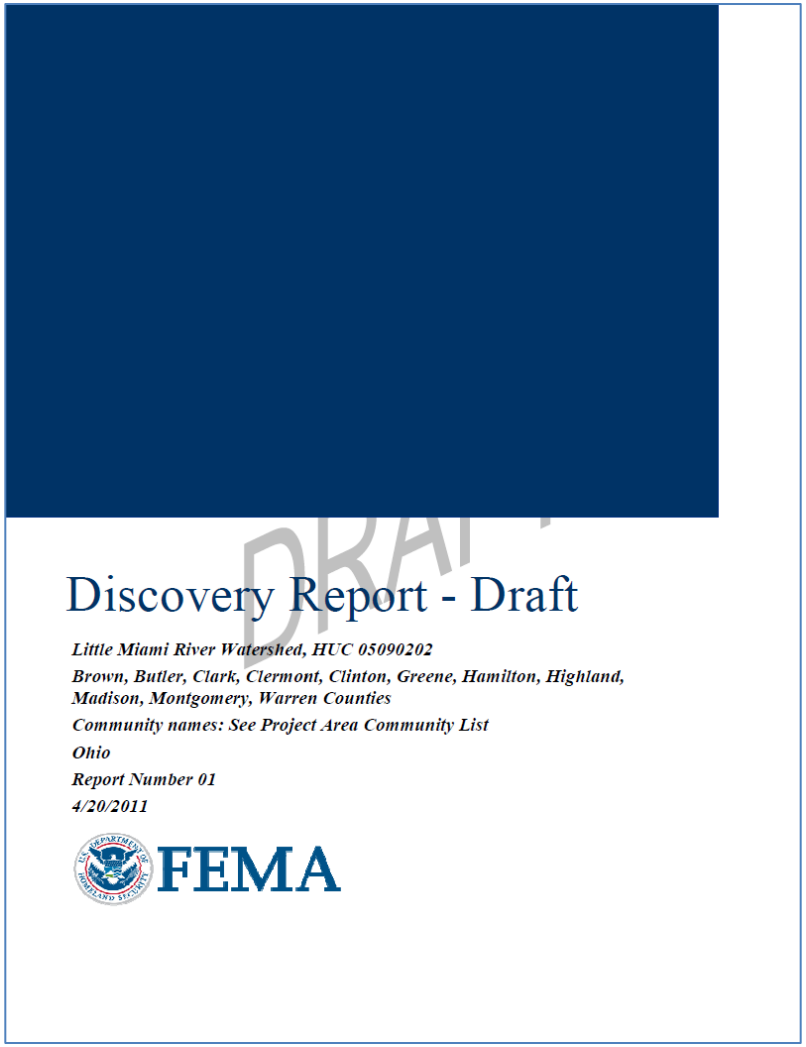
Discovery Products: Maps



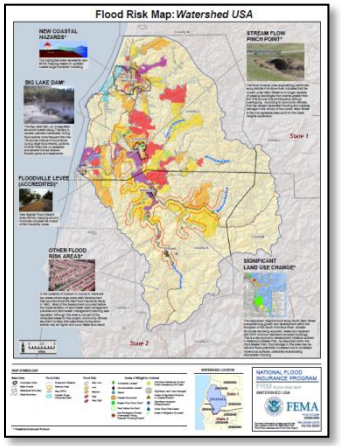
- Two Discovery Maps:
  - Flood Risk
    - Average Annualized Loss (AAL)
    - Coordinated Needs Management Strategy (CNMS)
    - Best Available Elevation Data
    - Repetitive Loss Areas
    - Critical Facilities
  - Flood Hazard
    - Effective Flood Hazard Zones
    - CNMS
    - USGS Gages
    - Dams

Discovery Products: Report

- General Project Information
- Watershed Stakeholder Coordination
- Data Analysis
  - Data used for Flood Risk Products
  - Other data and information
- Discovery Meeting
- Follow-Up and Conclusions



Risk MAP Products

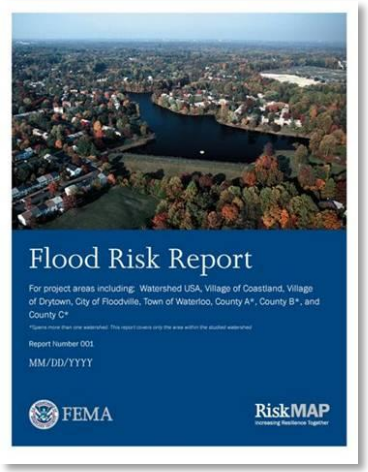


Flood Risk Map

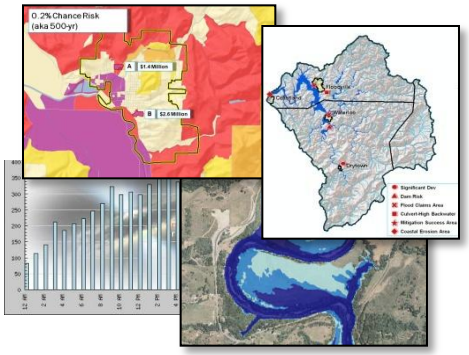
Flood Risk Database

Flood Risk Assessment Data →
Flood Depth & Analysis Grids →

← Changes Since Last FIRM Data
← Areas of Mitigation Interest



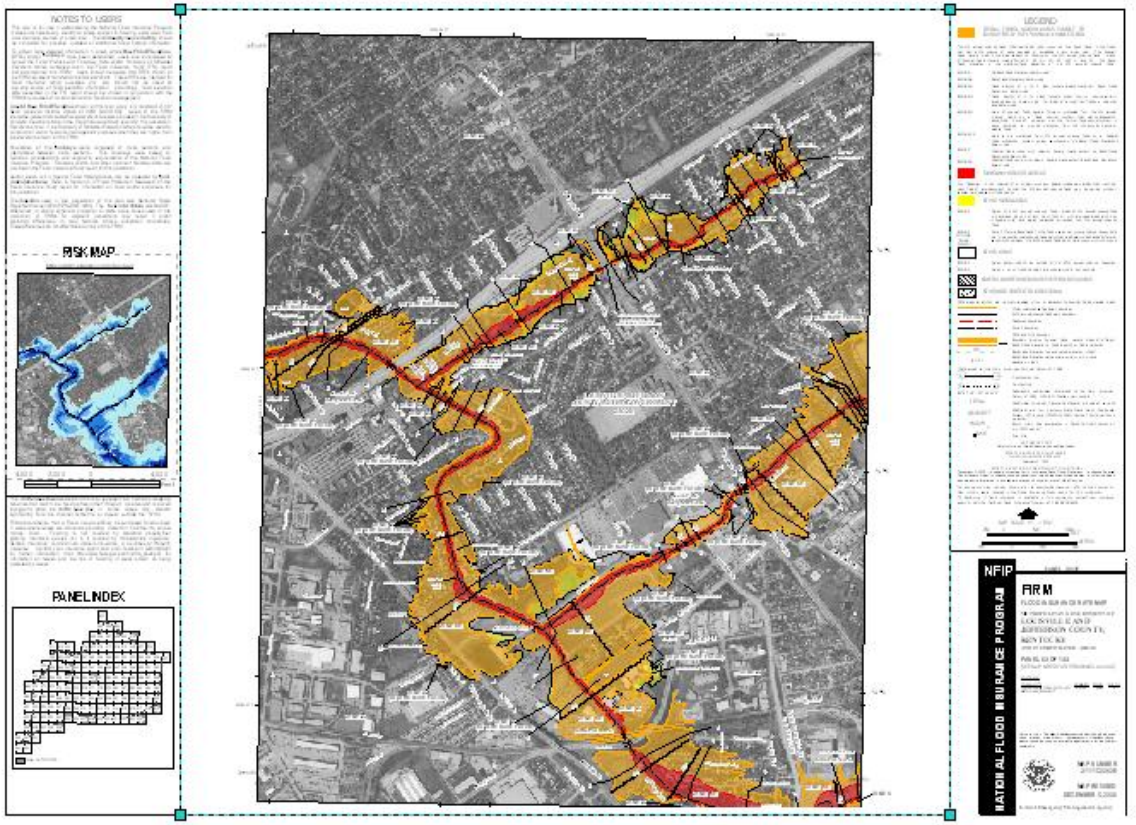
Flood Risk Report



Ad-Hoc Flood Risk Analyses

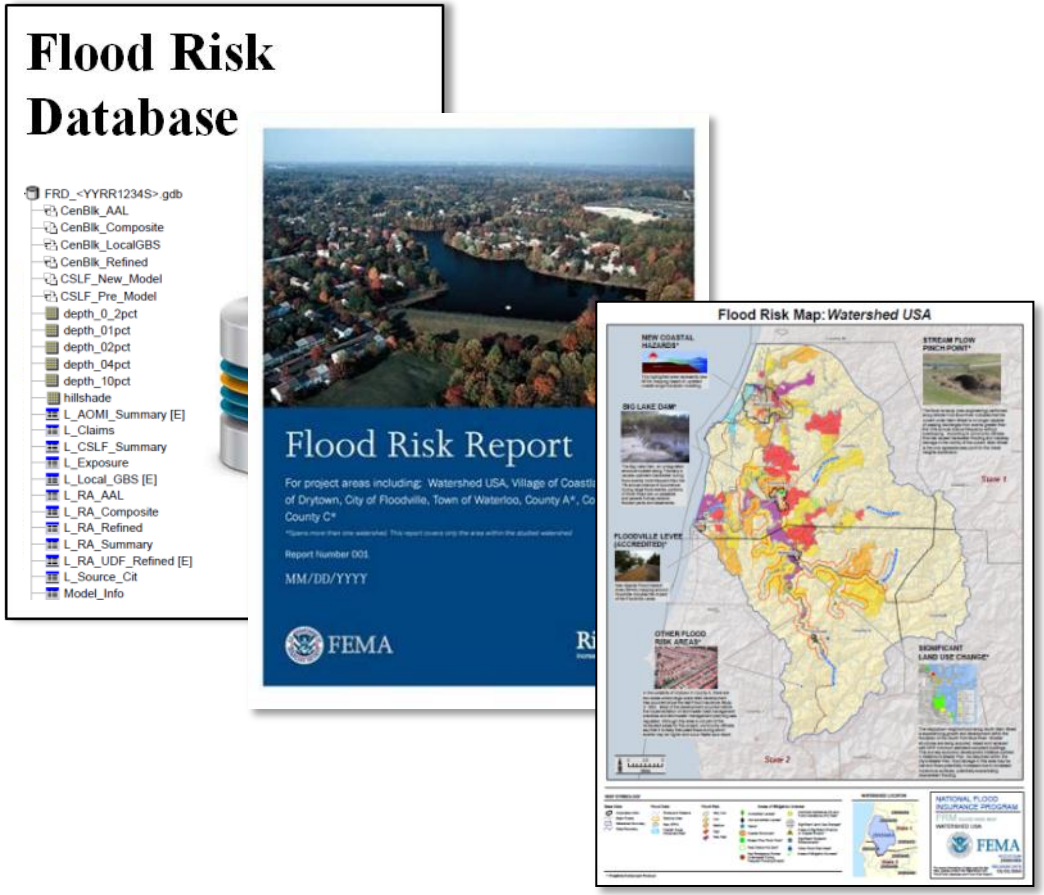
Risk MAP Products: Regulatory

FIS Reports and DFIRM Maps will continue to fulfill regulatory requirements and support the NFIP

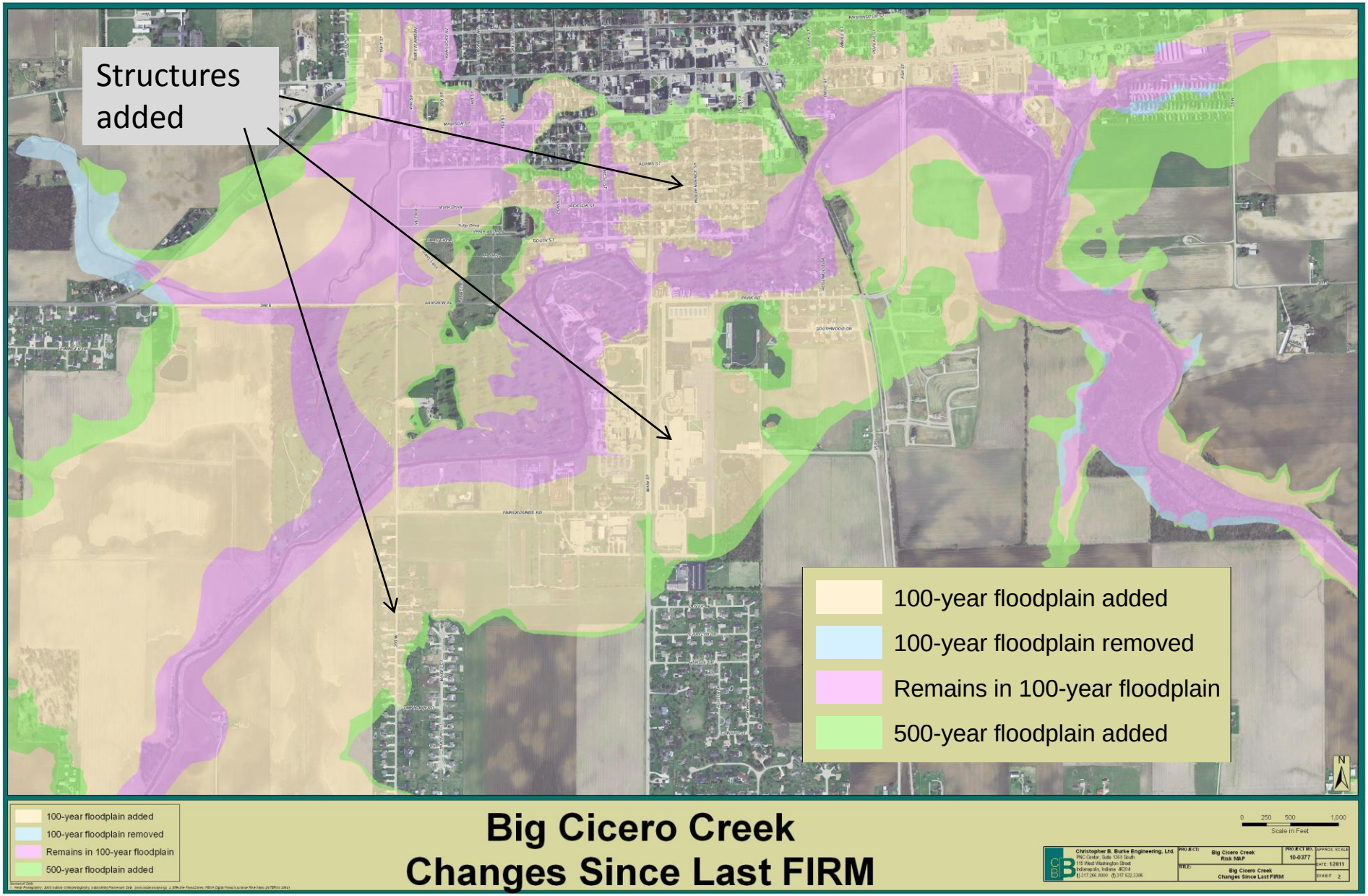


Risk Map Products (Non-Regulatory)

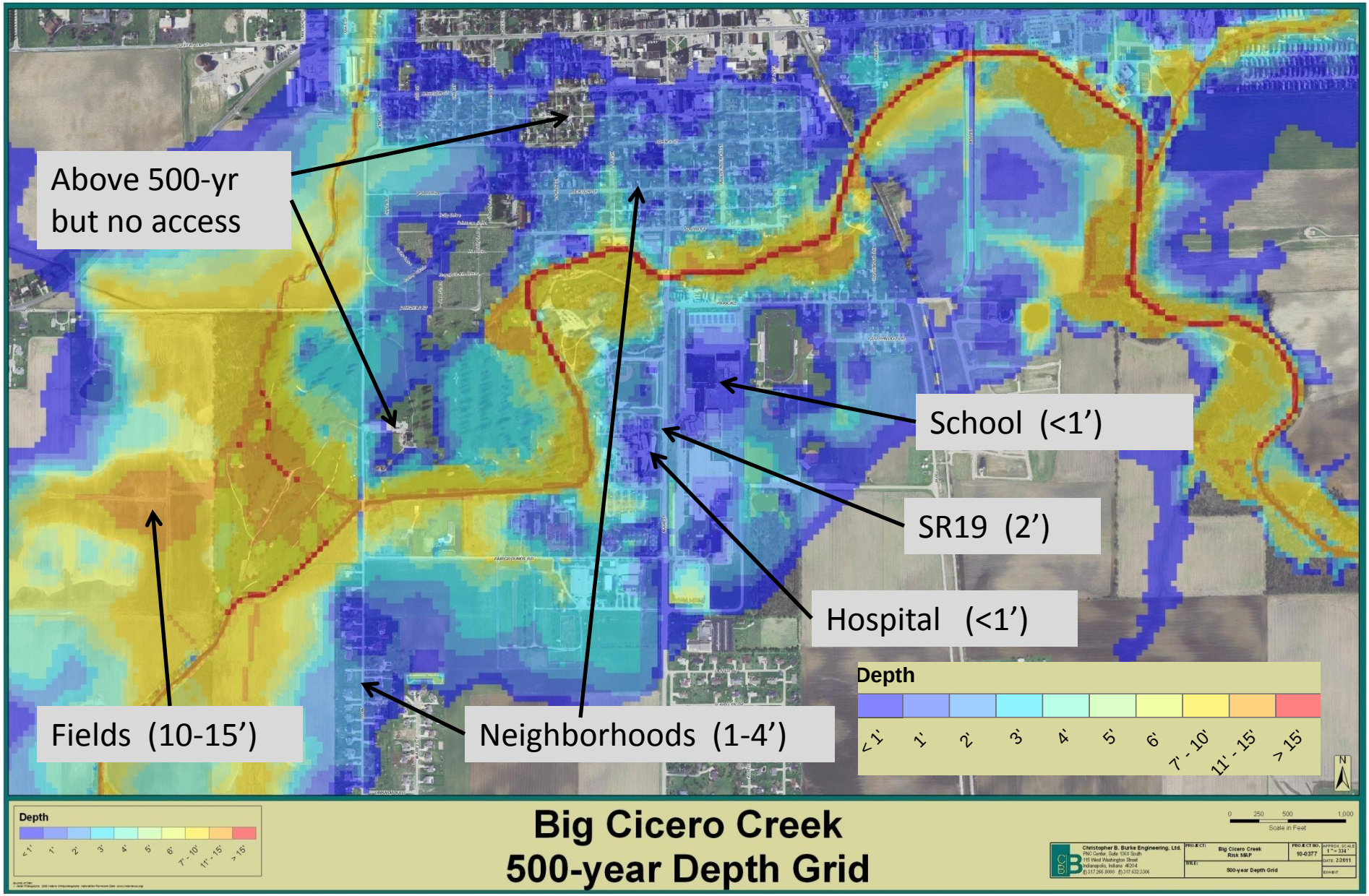
Non-Regulatory Flood Risk Products



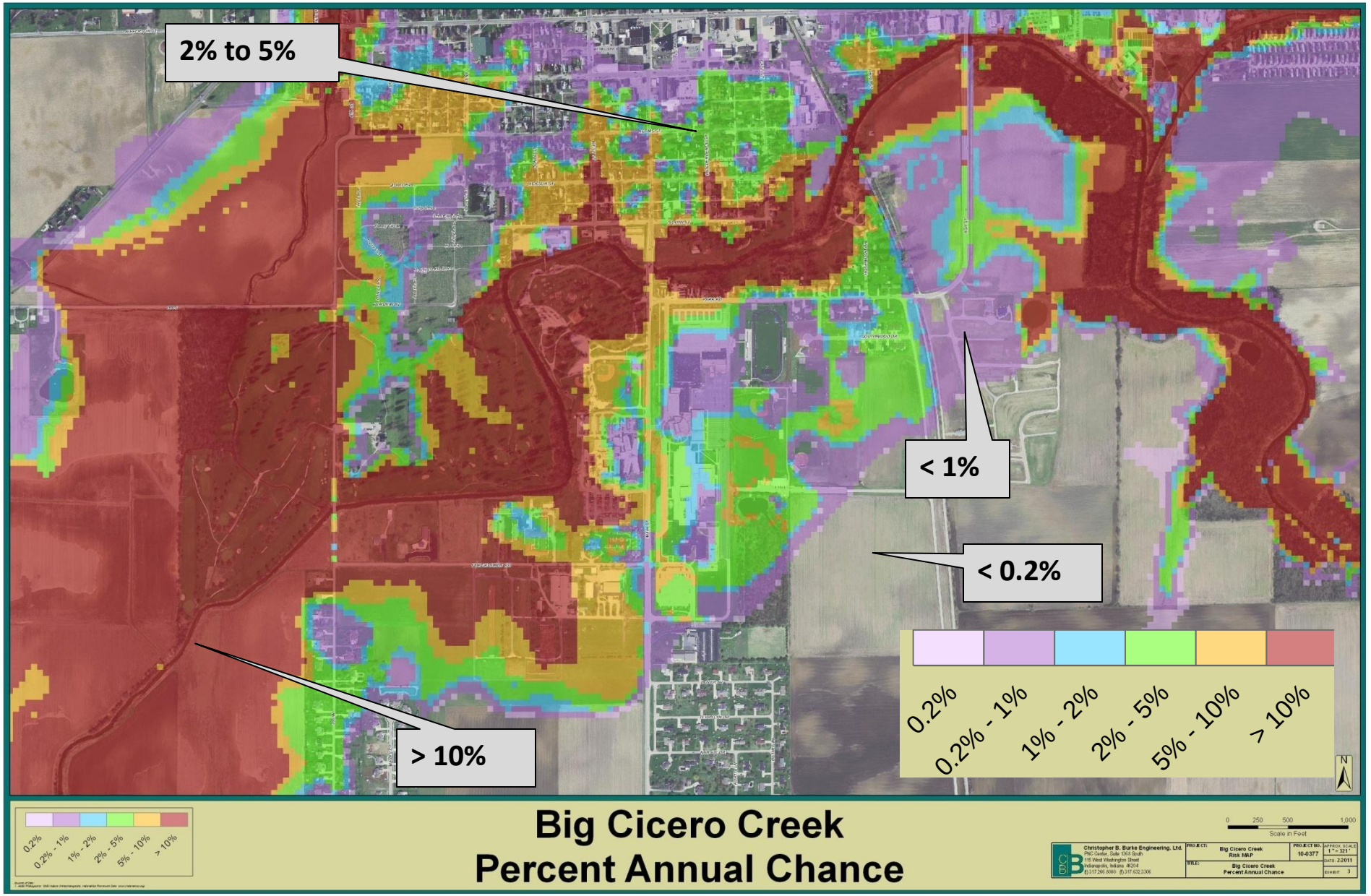
Changes Since Last FIRM



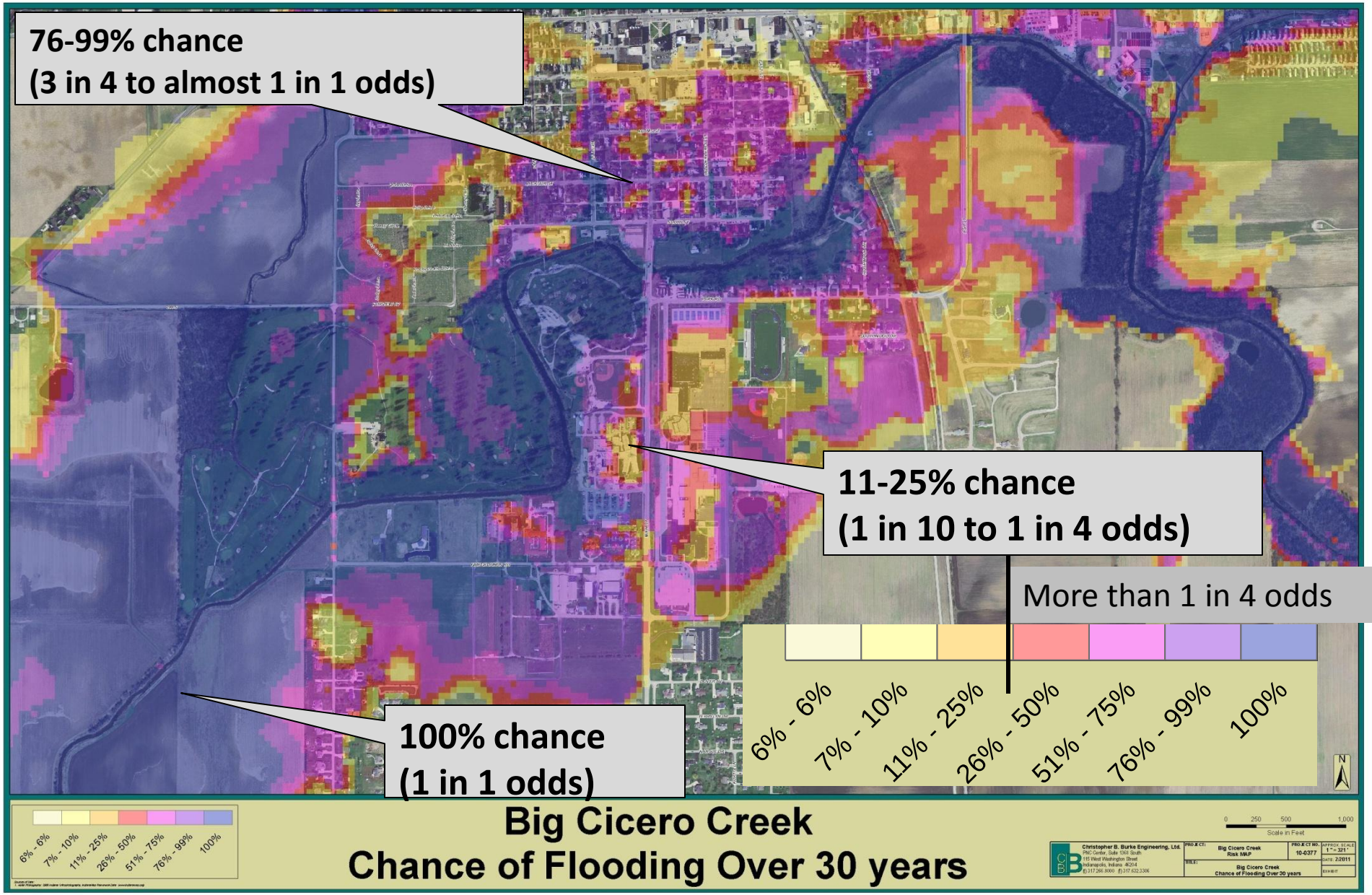
500-year Flood Depth Grid



Percent Annual Chance



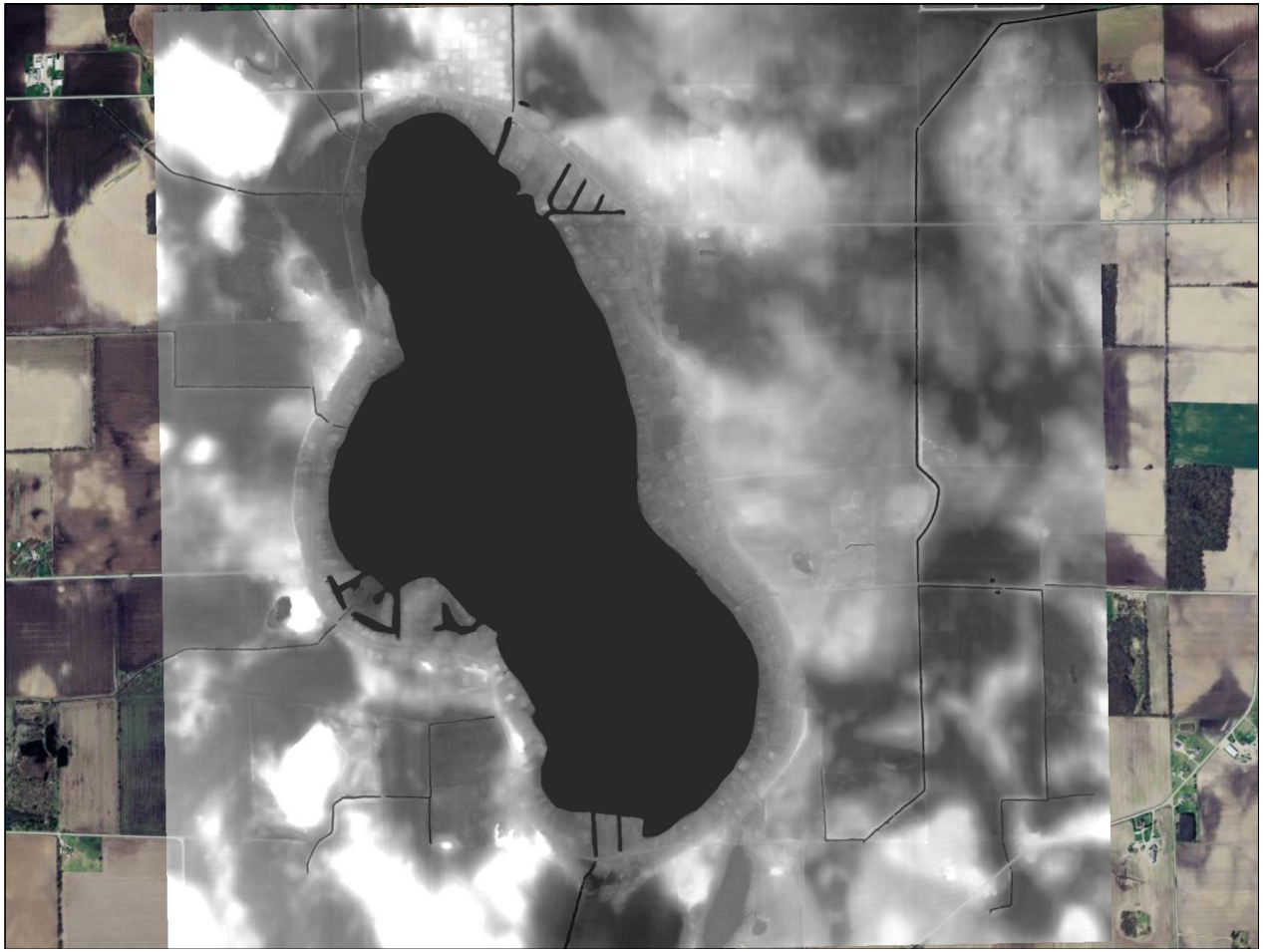
Percent Chance Over 30 Years



Relationship:
Return Interval -to- % Chance During 30 Years

Risk of Flood at Least Once During 30 Year Time Period		Equivalent Average Risk of Flood in Any Given Year	
Tolerable % Chance	Approximate Odds	% Chance Every Year	Average Recurrence Interval
3 %	1 in 30	0.1 %	1,000 yr
5.8 %	1 in 20	0.2 %	500 yr
14 %	1 in 7	0.5 %	200 yr
26 %	1 in 4	1.0 %	100 yr

LiDAR



LiDAR Schedule

Indiana's Imagery Program

Base Products

1-Foot Pixel Resolution - 4-Band Imagery (red, green, blue, near infrared)
USGS Compliant LiDAR
Digital Elevation Model

Available Buy Ups

Increased Resolution – 3 Inch and 6 Inch
Digital Terrain Model with Contours
Planimetric Mapping
Increased Resolution LiDAR
Land Use/Land Cover
Automated Feature Extraction
Surveying Services
GIS Services
Remote Sensing Services
Photogrammetric Services
Impervious Surface Mapping
Oblique Aerial Imagery
Line of Site Analysis
Utility Inventory
3-D Modeling
Mobile Mapping Services

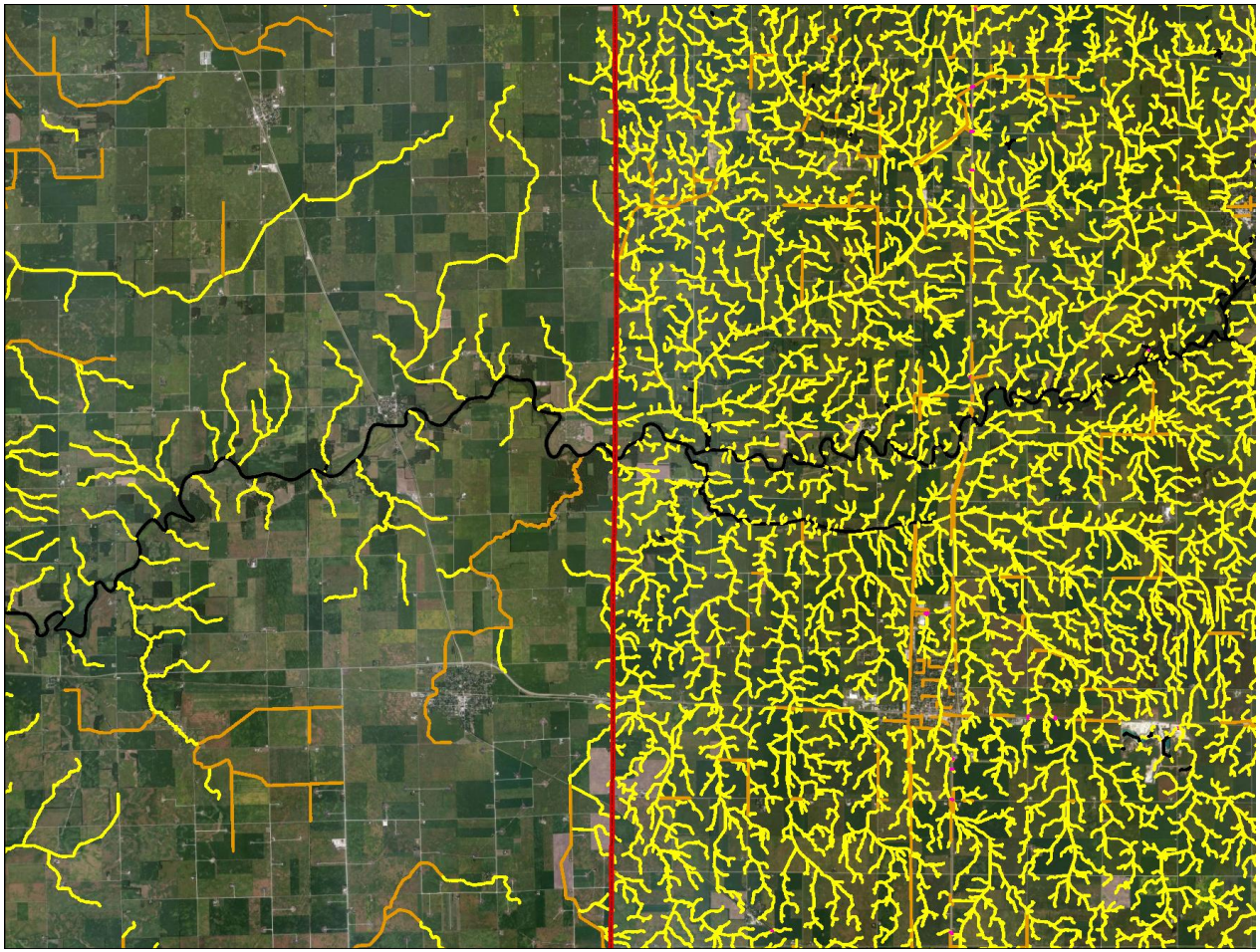
Learn More +

For more information on the program and how to buy up, please contact Jim Sparks at 317.234.5889. Information is also available at www.indianaimagery.com

"A new foundation for growth"

INDIANA OFFICE OF TECHNOLOGY
Indiana Geographic Information Consortium
WOOLPERT
DESIGN | GEOSPATIAL | INFRASTRUCTURE

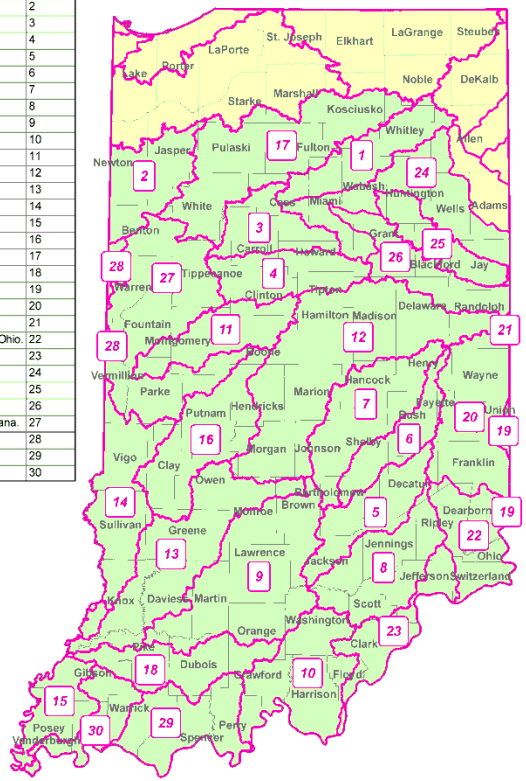
Local-Res NHD Project



NHD Schedule

Proposed Priorities of Subbasins for Upgrade, Phase 1

HUC_8	HU_8_Name	Priority
05120104	Eel. Indiana.	1
07120002	Iroquois. Illinois, Indiana.	2
05120105	Middle Wabash-Deer. Indiana.	3
05120107	Wildcat. Indiana.	4
05120206	Upper East Fork White. Indiana.	5
05120205	Flatrock-Haw . Indiana.	6
05120204	Driftw ood. Indiana.	7
05120207	Muscatatuck. Indiana.	8
05120208	Low er East Fork White. Indiana.	9
05140104	Blue-Sinking. Kentucky, Indiana.	10
05120110	Sugar. Indiana.	11
05120201	Upper White. Indiana.	12
05120202	Low er White. Indiana.	13
05120111	Middle Wabash-Busseron. Illinois, Indiana.	14
05120113	Low er Wabash. Illinois, Indiana.	15
05120203	Eel (WFWR). Indiana.	16
05120106	Tippecanoe. Indiana.	17
05120209	Patoka. Indiana.	18
05080002	Low er Great Miami, Indiana, Ohio.	19
05080003	Whitew ater. Indiana, Ohio.	20
05080001	Upper Great Miami, Indiana, Ohio.	21
05090203	Middle Ohio-Laughery. Indiana, Kentucky, Ohio.	22
05140101	Silver-Little Kentucky. Indiana, Kentucky.	23
05120101	Upper Wabash. Indiana, Ohio.	24
05120102	Salamonie. Indiana.	25
05120103	Mississinew a. Indiana, Ohio.	26
05120108	Middle Wabash-Little Vermilion. Illinois, Indiana.	27
05120109	Vermilion. Illinois, Indiana.	28
05140201	Low er Ohio-Little Pigeon. Indiana.	29
05140202	Highland-Pigeon. Indiana, Kentucky.	30



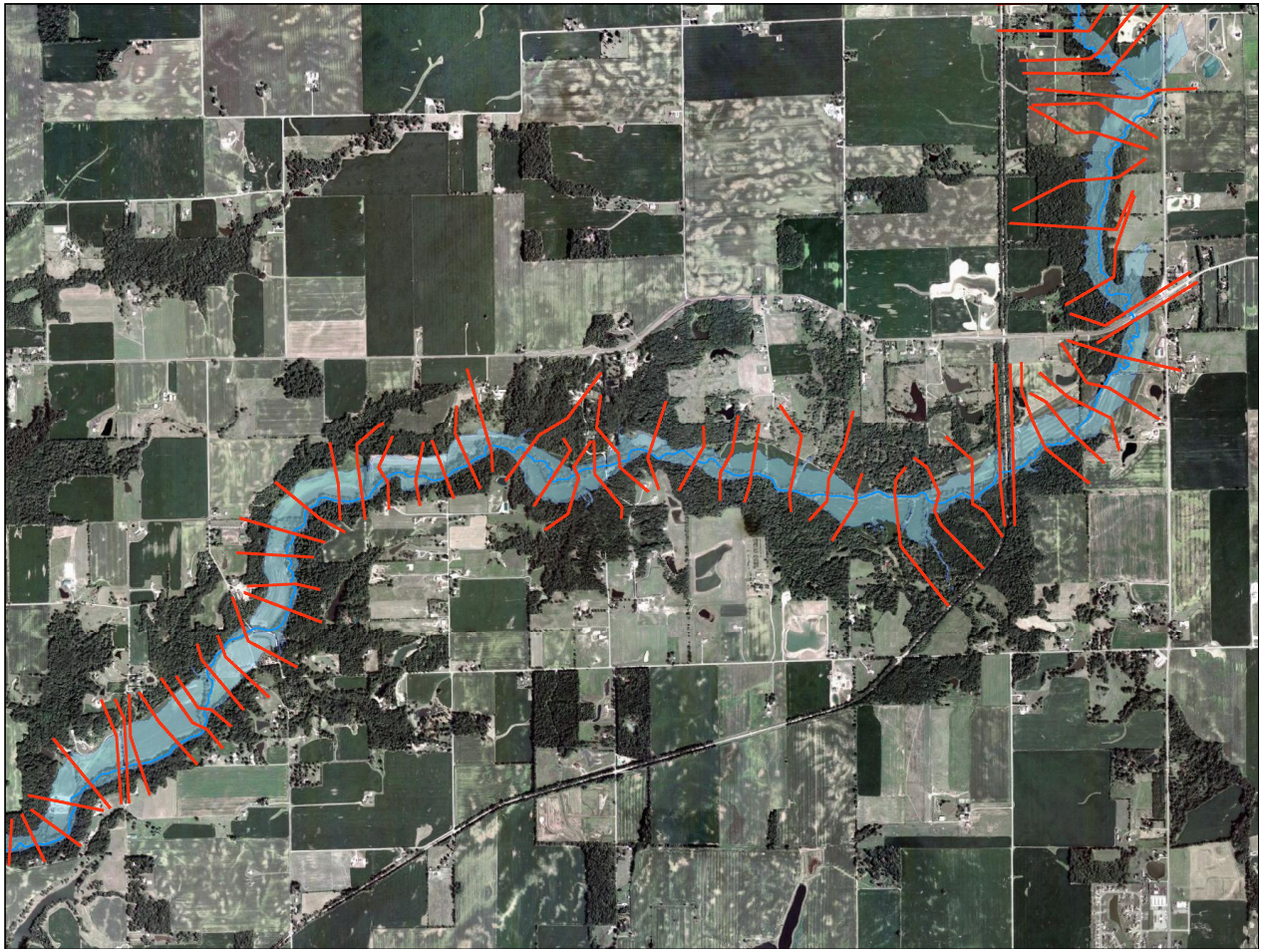
Project Phase

1

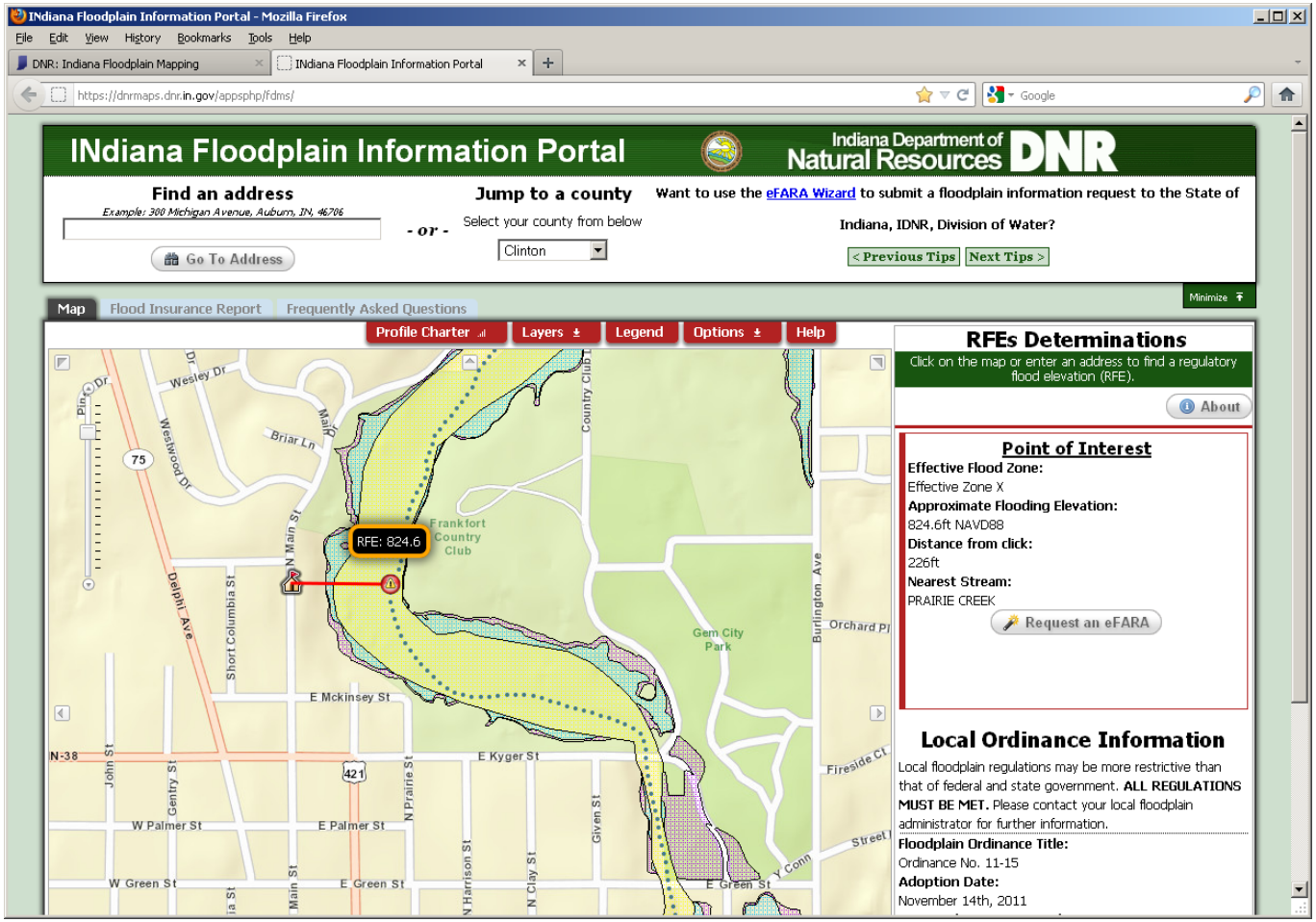
2

IGIC Waters Workgroup
AECOM
NHD Local Resolution Upgrade Project
February 22, 2012

Zone A mapping



INFIP


INdiana Floodplain Information Portal - Mozilla Firefox
File Edit View History Bookmarks Tools Help
DNR: Indiana Floodplain Mapping
INdiana Floodplain Information Portal
https://dnrmaps.dnr.in.gov/appsphp/fdms/
INdiana Floodplain Information Portal
Indiana Department of Natural Resources DNR
Find an address
Example: 300 Michigan Avenue, Auburn, IN, 46706
Go To Address
- or -
Jump to a county
Select your county from below
Clinton
Want to use the eFARA Wizard to submit a floodplain information request to the State of Indiana, IDNR, Division of Water?
< Previous Tips
Next Tips >
Minimize
Map
Flood Insurance Report
Frequently Asked Questions
Profile Charter
Layers
Legend
Options
Help
RFE: 824.6
Frankfort Country Club
Gem City Park
Wesley Dr
Briar Ln
Country Club Dr
Westwood Dr
Delphi Ave
Short Columbia St
N Main St
Burlington Ave
E Mckinsey St
E Kyger St
W Palmer St
E Palmer St
W Green St
E Green St
N Prairie St
N Harrison St
N Clay St
Given St
Fireside Ct
RFEs Determinations
Click on the map or enter an address to find a regulatory flood elevation (RFE).
About
Point of Interest
Effective Flood Zone:
Effective Zone X
Approximate Flooding Elevation:
824.6ft NAVD88
Distance from click:
226ft
Nearest Stream:
PRAIRIE CREEK
Request an eFARA
Local Ordinance Information
Local floodplain regulations may be more restrictive than that of federal and state government. ALL REGULATIONS MUST BE MET. Please contact your local floodplain administrator for further information.
Floodplain Ordinance Title:
Ordinance No. 11-15
Adoption Date:
November 14th, 2011